

Subpart K—National Emission Standards for Radionuclide Emissions From Elemental Phosphorus Plants

SOURCE: 54 FR 51699, Dec. 15, 1989, unless otherwise noted.

§61.120 Applicability.

The provisions of this subpart are applicable to owners or operators of calciners and nodulizing kilns at elemental phosphorus plants.

§61.121 Definitions.

(a) *Elemental phosphorus plant or plant* means any facility that processes phosphate rock to produce elemental phosphorus. A plant includes all buildings, structures, operations, calciners and nodulizing kilns on one contiguous site.

(b) *Calciner or Nodulizing kiln* means a unit in which phosphate rock is heated to high temperatures to remove organic material and/or to convert it to a nodular form. For the purpose of this subpart, calciners and nodulizing kilns are considered to be similar units.

§61.122 Emission standard.

Emissions of polonium-210 to the ambient air from all calciners and nodulizing kilns at an elemental phosphorus plant shall not exceed a total of 2 curies a year; except that compliance with this standard may be conclusively shown if the elemental phosphorus plant:

(a) Installs a Hydro-Sonic® Tandem Nozzle Fixed Throat Free-Jet Scrubber System including four scrubber units,

(b) All four scrubber units are operated continuously with a minimum average over any 6-hour period of 40 inches (water column) of pressure drop across each scrubber during calcining of phosphate shale,

(c) The system is used to scrub emissions from all calciners and/or nodulizing kilns at the plant, and

(d) Total emissions of polonium-210 from the plant do not exceed 4.5 curies per year.

Alternative operating conditions, which can be shown to achieve an overall removal efficiency for emissions of polonium-210 which is equal to or greater than the efficiency which would be achieved under the operating conditions described in paragraphs (a), (b), and (c) of this section, may be used with prior approval of the Administrator. A facility shall apply for such approval in writing, and the Administrator shall act upon the request within 30 days after receipt of a complete and technically sufficient application.

[56 FR 65943, Dec. 19, 1991]

§61.123 Emission testing.

(a) Each owner or operator of an elemental phosphorus plant shall test emissions from the plant within 90 days of the effective date of this standard and annually thereafter. The Administrator may temporarily or permanently waive the annual testing requirement or increase the frequency of testing, if the Administrator determines that more testing is required.

(b) The Administrator shall be notified at least 30 days prior to an emission test so that EPA may, at its option, observe the test.

(c) An emission test shall be conducted at each operational calciner or nodulizing kiln. If emissions from a calciner or nodulizing kiln are discharged through more than one stack, then an emission test shall be conducted at each stack and the total emission rate from the calciner or kiln shall be the sum of the emission rates from each of the stacks.

(d) Each emission test shall consist of three sampling runs that meet the requirements of § 61.125. The phosphate rock processing rate during each run shall be recorded. An emission rate in curies per metric ton of phosphate rock processed shall be calculated for each run. The average of all three runs shall apply in computing the emission rate for the test. The annual polonium-210 emission rate from a calciner or nodulizing kiln shall be determined by multiplying the measured polonium-210 emission rate in curies per metric ton of phosphate rock processed by the annual phosphate rock processing rate in metric tons. In determining the annual phosphate rock processing rate, the values used for operating hours and operating capacity shall be values that will maximize the expected processing rate. For determining compliance with the emission standard of § 61.122, the total annual emission rate is the sum of the annual emission rates for all operating calciners and nodulizing kilns.

(e) If the owner or operator changes his operation in such a way as to increase his emissions of polonium-210, such as changing the type of rock processed, the temperature of the calciners or kilns, or increasing the annual phosphate rock processing rate, then a new emission test, meeting the requirements of this section, shall be conducted within 45 days under these conditions.

(f) Each owner or operator of an elemental phosphorus plant shall furnish the Administrator with a written report of the results of the emission test within 60 days of conducting the test. The report must provide the following information:

(1) The name and location of the facility.

(2) The name of the person responsible for the operation of the facility and the name of the person preparing the report (if different).

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(3) A description of the effluent controls that are used on each stack, vent, or other release point and an estimate of the efficiency of each device.

(4) The results of the testing, including the results of each sampling run completed.

(5) The values used in calculating the emissions and the source of these data.

(6) Each report shall be signed and dated by a corporate officer in charge of the facility and contain the following declaration immediately above the signature line: "I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. See, 18 U.S.C. 1001."

§ 61.124 Recordkeeping requirements.

The owner or operator of any plant must maintain records documenting the source of input parameters including the results of all measurements upon which they are based, the calculations and/or analytical methods used to derive values for input parameters, and the procedure used in emission testing. This documentation should be sufficient to allow an independent auditor to verify the accuracy of the results of the emission testing. These records must be kept at the site of the plant for at least five years and, upon request, be made available for inspection by the Administrator, or his authorized representative.

§ 61.125 Test methods and procedures.

(a) Each owner or operator of a source required to test emissions under § 61.123, unless an equivalent or alternate method has been approved by the Administrator, shall use the following test methods:

(1) Test Method 1 of appendix A to 40 CFR part 60 shall be used to determine sample and velocity traverses;

(2) Test Method 2 of appendix A to 40 CFR part 60 shall be used to determine velocity and volumetric flow rate;

(3) Test Method 3 of appendix A to 40 CFR part 60 shall be used for gas analysis;

(4) Test Method 5 of appendix A to 40 CFR part 60 shall be used to collect particulate matter containing the polonium-210; and

(5) Test Method 111 of appendix B to 40 CFR part 61 shall be used to determine the polonium-210 emissions.

§ 61.126 Monitoring of operations.

(a) The owner or operator of any source subject to this subpart using a wet-scrubbing emission control device shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement and recording of the pressure drop of the gas stream across each scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascal (± 1 inch of water). The owner or operator of any source subject to this subpart using a wet-scrubbing emission control device shall also install, calibrate, maintain, and operate a monitoring device for the continuous measurement and recording of the scrubber fluid flow rate. These continuous measurement recordings shall be maintained at the source and made available for inspection by the Administrator, or his authorized representative, for a minimum of 5 years.

(b) The owner or operator of any source subject to this subpart using an electrostatic precipitator control device shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement and recording of the primary and secondary current and the voltage in each electric field. These continuous measurement recordings shall be maintained at the source and made available for inspection by the Administrator, or his authorized representative, for a minimum of 5 years.

[56 FR 65943, Dec. 19, 1991]

§ 61.127 Exemption from the reporting and testing requirements of 40 CFR 61.10.

All facilities designated under this subpart are exempt from the reporting requirements of 40 CFR 61.10.